

AMENDMENTS TO THE CLAIMS

Claim 1 (Canceled)

Claim 2 (Currently Amended): A process for producing a high purity synthetic quartz powder, the process comprising

baking a silica gel powder, made by a wet process, to form a synthetic quartz powder, where the baking is at atmospheric pressure and at a temperature in a range higher than a temperature at which hydroxyl groups are removed from the silica gel powder and lower than a temperature at which the silica gel powder sinters; and

baking the synthetic quartz powder under a low pressure atmosphere simultaneously within a pressure range of from 0 Pa to less than 100 Pa and at a baking temperature, T, in a range of $600^{\circ}\text{C} < T < 1400^{\circ}\text{C}$, wherein

the baking at atmospheric pressure is in dry air or an oxidizing atmosphere;

the baking temperature during the baking at atmospheric pressure is in a range from more than 800°C to less than 1400°C ; and

the synthetic quartz powder is baked at atmospheric pressure for a baking time of 5 to 70 hours.

Claim 3 (Canceled)

Claim 4 (Currently Amended): The process according to ~~Claims 1 or 2~~ Claim 2, wherein the low pressure atmosphere is at a pressure of less than 50 Pa.

Claim 5 (Currently Amended): The process according to ~~Claims 1 or 2~~ Claim 2, wherein the baking under the low pressure atmosphere is finished when the low pressure atmosphere reaches a preselected pressure.

Claim 6 (Original): The process according to Claim 5, wherein the preselected pressure is less than 5 Pa.

Claims 7-9 (Canceled)

Claim 10 (Currently Amended) The process according to ~~Claims 1 or 2~~ Claim 2, wherein the baking under the low pressure atmosphere forms a synthetic quartz powder having a carbon content of less than 2 ppm.

Claim 11 (Currently Amended) The process according to ~~Claims 1 or 2~~ Claim 2, wherein the baking under the low pressure atmosphere forms a synthetic quartz powder having a hydroxyl group content of less than 50 ppm.